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EXAMINER

SNIDER, THERESA T

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,723

Applicant(s)

KASPER ET AL.

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 47 is/are allowed.
6) ☒ Claim(s) 1,2,4-8,13-15,22-24,30-32,36-38,41-46 and 48-50 is/are rejected.
7) ☒ Claim(s) 3, 9-12, 16-21, 25-29, 33-35 and 39-40 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 42 and 46 are objected to because of the following informalities: Claim 42, line 6, ‘;’ should be inserted after ‘cleaned’. Claim 46, line 16, ‘and’ should be inserted after ‘direction;’. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 42-46 and 48-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 42, line 13, ‘assembly’ should be inserted after ‘transmission’.

Claim 43, line 18, ‘assembly’ should be deleted;

Line 21, ‘the operator’ should be replaced with ‘an operator’.

Claim 46, line 18, ‘assembly’ should be deleted.

Claim 48, line 4, ‘the drive’ lacks proper antecedent basis.

Claim 49, line 19, ‘assembly’ should be deleted.

Dependent claim 49 should be renumbered to claim ‘50’.

Claim ‘50’, line 3, ‘the liquid distributor’ lacks proper antecedent basis.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. Claims 1-2, 4, 13-14, 22-23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted State of the Prior Art as set forth in the preamble Jepson claim(hereafter ASPA) in view of Ripple.

ASPA discloses a similar cleaning apparatus however fails to disclose a traction driver mounted to the base.

Ripple discloses a surface cleaning apparatus having a traction driver mounted to the base of a housing for movement along a surface to be cleaned (fig. 1, #6, col. 6, lines 69-72).

Ripple discloses a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface (col. 3, lines 12-20). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Ripple in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

With respect to claim 2, Ripple discloses the power drive assembly including a drive motor coupled to the traction driver and a drive actuator on the handle (col. 3, lines 12-20, claim 4).

With respect to claim 4, Ripple discloses an electric motor and a transmission assembly (col. 3, lines 12-20).

With respect to claim 13, Ripple discloses a unidirectional drive motor and a reversible transmission assembly (col. 4, lines 8-36).

With respect to claim 14, Ripple discloses a belt between the transmission assembly and the driver (col. 3, line 15).

With respect to claim 22, Ripple discloses a drive actuator on the handle (claim 4).

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With respect to claim 23, Ripple discloses the actuator adapted to control forward and reverse movement of the base (col. 1, lines 40-46).

With respect to claim 31, Ripple discloses the traction driver being one of at least two wheels to support the base (fig. 1, #6).

5. Claims 1-2, 4-6, 13-14, 22-23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted State of the Prior Art as set forth in the preamble Jepson claim(hereafter ASPA) in view of Meyer et al.('740)

ASPA discloses a similar cleaning apparatus however fails to disclose a traction driver mounted to the base.

Meyer et al.('740) discloses a surface cleaning apparatus having a traction driver mounted to the base of a housing for movement along a surface to be cleaned (fig. 1, #16). Meyer et al.('740) discloses a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface (col. 3, lines 18-23). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

With respect to claim 2, Meyer et al.('740) discloses the power drive assembly including a drive motor coupled to the traction driver and a drive actuator on the handle (col. 3, lines 18-23, col. 6, line 66-col. 7, line 25).

With respect to claim 4, Meyer et al.('740) discloses an electric motor and a transmission assembly (col. 3, lines 18-23).

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With respect to claim 5, Meyer et al.('740) discloses two drive trains, one for each direction and a clutch moveable between the drive trains (col. 7, lines 2-25).

With respect to claim 6, Meyer et al.('740) discloses the drive actuator connected to the clutch (col. 7, lines 18-21).

With respect to claim 13, Meyer et al.('740) discloses a unidirectional drive motor and a reversible transmission assembly (col. 6, line 66-col. 7, line 25).

With respect to claim 14, Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

With respect to claim 22, Meyer et al.('740) discloses a drive actuator on the handle (claim 6).

With respect to claim 23, Meyer et al.('740) discloses the actuator adapted to control forward and reverse movement of the base (claim 6).

With respect to claim 31, Meyer et al.('740) discloses the traction driver being one of at least two wheels to support the base (fig. 1, #16).

6. Claims 7-8, 15, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al.('740) as applied to claim 1 above, and further in view of Martin et al..

ASPA in view of Meyer et al.('740) discloses a similar cleaning apparatus however fails to disclose the drive actuator being a handle grip or the inclusion of a belt tensioner.

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of

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ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Meyer et al. ('740) to allow for directing of the apparatus over a surface with the handle without accidentally changing direction.

With respect to claim 8, Martin et al. discloses a cable connected between the grip and the clutch (fig. 2, #200).

With respect to claim 15, Martin et al. disclose the use of a belt tensioner assembly to maintain tension in a belt (col. 5, lines 29-33). It would have been obvious to one of ordinary skill in the art to provide the tensioner of Martin et al. on the drive belt, as well as on the agitator belt, to ensure the belt is in proper tension for the most effective operation.

With respect to claims 25 and 28, Martin et al. discloses the drive actuator biased to a neutral position and having a lock (col. 8, lines 6-45).

7. Claims 7-8, 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 1 above, and further in view of Martin et al..

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose the drive actuator being a handle grip or the inclusion of a belt tensioner.

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Ripple to allow for directing of the apparatus over a surface with the handle without accidentally changing direction of the driver.

With respect to claim 8, Martin et al. discloses a cable connected between the grip and the clutch (fig. 2, #200).

With respect to claim 15, Martin et al. disclose the use of a belt tensioner assembly to maintain tension in a belt (col. 5, lines 29-33). It would have been obvious to one of ordinary skill in the art to provide the tensioner of Martin et al. on the drive belt, as well as on the agitator belt, to ensure the belt is in proper tension for the most effective operation.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 1 above, and further in view of Barnhart.

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose a carry handle affixed to the handle.

Barnhart discloses a cleaning apparatus with an upright handle and a carry handle on the handle (fig. 1, unnumbered region at lower end of handle). It would have been obvious to one of ordinary skill in the art to provide the carry handle of Barnhart in ASPA in view of Ripple to allow having better positioning to carry the apparatus from one place to another without having to lift by the gripping region.

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al. ('740) as applied to claim 1 above, and further in view of Barnhart.

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose a carry handle affixed to the handle.

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Barnhart discloses a cleaning apparatus with an upright handle and a carry handle on the handle (fig. 1, unnumbered region at lower end of handle). It would have been obvious to one of ordinary skill in the art to provide the carry handle of Barnhart in ASPA in view of Ripple to allow having better positioning to carry the apparatus from one place to another without having to lift by the gripping region.

10. Claims 32, 35-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Meyer et al.('740) and McCormick.

Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver or grip actuator.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Meyer et al.('740) discloses a surface cleaning apparatus having a drive motor connected between a transmission assembly and one of the wheels (fig. 1, #16, col. 3, lines 18-23).

It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in Louis et al. to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

Meyer et al.('740) discloses two drive trains, one for each direction and a clutch

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moveable between the drive trains (col. 7, lines 2-25).

Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

McCormick discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 5, lines 34-37). It would have been obvious to one of ordinary skill in the art to provide the actuator of McCormick in Louis et al. in view of Meyer et al.('740) to allow for directing of the apparatus over a surface with the handle without accidentally changing direction of the driver.

McCormick discloses a link connected between the grip and the clutch (fig. 2, #66).

With respect to claims 35 and 38, McCormick discloses a portion of the power drive assembly mounted to the handle (figs. 1-2, #36,40). It would have been obvious to one of ordinary skill in the art to provide the power drive assembly of Louis et al. in view of Meyer et al.('740) in the handle, as disclosed by McCormick, to provide for a lighter base for propulsion across a surface.

With respect to claims 36 and 37, McCormick discloses the vacuum motor and drive motor are independent of each other. It would have been obvious to one of ordinary skill in the art to provide the independent motors of McCormick in Louis et al. in view of Meyer et al.('740) to prevent the suction motor from constraining the drive speed of the drive assembly.

With respect to claim 41, Louis et al. discloses the recovery tank provided in a lip of the base, therefore it is mounted in the base (fig. 1, #7, unnumbered region above lead line of #150).

11. Claims 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Meyer et al.('740) and Frederick et al..

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Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver, grip actuator or lock.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Meyer et al.('740) discloses a surface cleaning apparatus having a drive motor connected between a transmission assembly and one of the wheels (fig. 1, #16, col. 3, lines 18-23).

It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in Louis et al. to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

Meyer et al.('740) discloses two drive trains, one for each direction and a clutch moveable between the drive trains (col. 7, lines 2-25).

Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

Frederick et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 5, lines 34-37). It would have been obvious to one of ordinary skill in the art to provide the actuator of McCormick in Louis et al. in view of Meyer et al.('740) to allow for directing of the apparatus over a surface with the handle

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without accidentally changing direction of the driver.

Frederick et al. discloses a connection between the grip and the clutch (fig. 1, #18).

Frederick et al. discloses a lock mounted on the handle for locking the handle grip (col. 5, lines 22-26 and col. 6, lines 10-18).

With respect to claim 44, it would have been obvious to one of ordinary skill in the art to determine the most appropriate lock structure in Louis et al. in view of Meyer et al. ('740) and Frederick et al. to allow for the greater ease in operation.

With respect to claim 45, Frederick et al. discloses handle grip biased to a neutral position for disablement of the drive assembly (col. 5, lines 22-26 and col. 6, lines 3-7).

With respect to claim 46, Frederick et al. discloses a rigid connection between the handle grip and the power drive assembly (col. 6, lines 61-65).

Response to Arguments

12. Applicant's arguments filed 2/16/2005 have been fully considered but they are not persuasive. Applicant urges that there is no motivation to provide the traction driver of Ripple into the ASPA. This is not found persuasive because Ripple discloses the use of the traction driver on 'other surface treating devices such as polishers, scrubbers and the like' (col. 6, lines 68-72). It is believed an extraction cleaner can be considered 'other surface treating devices such as polishers, scrubbers and the like'. Further, though Examiner believes one would be motivated to provide a traction driver in the ASPA to would reduce operator fatigue by providing for a self-propelled machine, Ripple discloses that the use of a traction driver insures that a 'cleaner will be

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moved over a carpet or other surface being cleaned at an optimum and uniform rate in order to secure uniform cleaning under the most effective condition' (col. 7, lines 10-15).

Applicant urges that the drive actuator of Ripple is not on the handle. Applicant is believed to be in error with his argument because Ripple discloses use of the handle to provide for actuation of the drive motor (col. 3, lines 12-20, claim 4). Therefore, the actuator can be considered 'on' on the handle.

Applicant urges that Ripple does not disclose a belt between a transmission assembly and the traction driver. Applicant is believed to be in error with his argument because Ripple discloses a belt between a transmission assembly and the traction driver (col. 3, lines 12-29). Does Applicant mean that the belt is directly connected to the traction driver, without any intervening elements?

Applicant urges that there is no motivation to provide the traction driver of Meyer et al. into the ASPA. This is not found persuasive because Meyer et al. discloses the use of the traction driver on 'handle controlled wheeled appliance' (col. 1, lines 37-38). It is believed an extraction cleaner can be considered a 'handle controlled wheeled appliance. Examiner believes one would be motivated to provide a traction driver in the ASPA to would reduce operator fatigue by providing for a self-propelled machine and to allow for cleaning at a uniform rate over a surface.

Applicant urges that the drive actuator of Meyer et al. is not on the handle. Applicant is believed to be in error with his argument because Meyer et al. discloses use of the handle to provide for actuation of the drive motor (col. 6, line 66-col. 7, line 25). Therefore, the actuator can be considered 'on' on the handle.

Applicant urges that Meyer et al. does not disclose a belt between a transmission assembly and the traction driver. Applicant is believed to be in error with his argument because Meyer et al. discloses a belt between a transmission assembly and the traction driver (col. 3, lines 18-23). Does Applicant mean that the belt is directly connected to the traction driver, without any intervening elements?

Applicant urges there is no motivation to provide the drive actuator of Martin et al. on either the above combinations of references. Applicant is believed to be in error with his arguments because, Ripple, Meyer et al. and Martin et al. disclose traction drivers. Martin et al. discloses an alternate means for actuating the driver. It is believed that replacing one actuating with the other is well within the skill of one of ordinary skill in the art.

Applicant urges that one would not be motivated to provide the belt tensioner of Martin et al. into either of the above combination of references. Applicant is believed to be in error with his argument because it is believed that the advantage of having a belt tensioner, to ensure proper tension in a drive belt, would be true for any drive belt, irrespective of it's location.

Applicant urges that there is no motivation to combine the carrying handle of Barnhart with the above combination of references. Applicant is believed to be in error with his arguments because Barnhart discloses the inclusion of a carrying handle with an upright handle. It is believed it would have been obvious to one of ordinary skill in the art to provide a carrying handle on the upright handles of the above combination of references to allow for less cumbersome movement of the apparatus up and down stairs.

Applicant urges that the turbine drive of Louis et al. does not have a belt drive between the turbine motor and the brushes. This argument is not persuasive because, unlike the argument

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for claim 12, claim 32 does not require the turbine motor to drive the housing. The secondary references provide the traction driving system and the belt therewith.

Allowable Subject Matter

13. Claim 47 is allowed.

14. Claims 3, 9-12, 16-21, 25-29, 33-35 and 39-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claim 49 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

16. Claims 42 and 48-49 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses an extraction surface cleaning apparatus with a housing including a base and an upright handle, a liquid dispensing system, a fluid recovery system, a traction driver and power drive assembly HOWEVER fails to disclose or fairly suggest the traction driver including a drive motor that is a reversible electric motor OR the transmission assembly including the structure set forth in claim 9 OR the power drive assembly including an air drive turbine motor OR the assembly including a belt tensioner having a plate slidably mounted to the housing, a pair of wheels rotatably mounted on the plate and a belt weaved between the wheels OR the power drive having a drive motor mounted on the housing and a flexible cable in driving relationship at

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one end with the motor and in driving relationship at the other end with the traction driver OR the power drive including a wheel sprocket non-rotatably connected to the traction driver and a drive motor mounted on the housing in driving relationship with the wheel sprocket OR the traction driver and power drive assembly including the structure as set forth in claim 20 OR the traction driver including the structure as set forth in claim 21 OR the assembly further including a drive actuator that is biased to a neutral position between the forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position OR there being a direct connection between the drive motor and the transmission assembly OR the assembly further including a handle grip with the connection between the grip and the power drive assembly includes a mounting block, slidable on the handle and a solenoid valve of the liquid dispensing system is mounted to the sliding block for movement therewith.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Theresa T. Snider
Primary Examiner
Art Unit 1744

**THERESA T. SNIDER
PRIMARY EXAMINER**

5/16/2005